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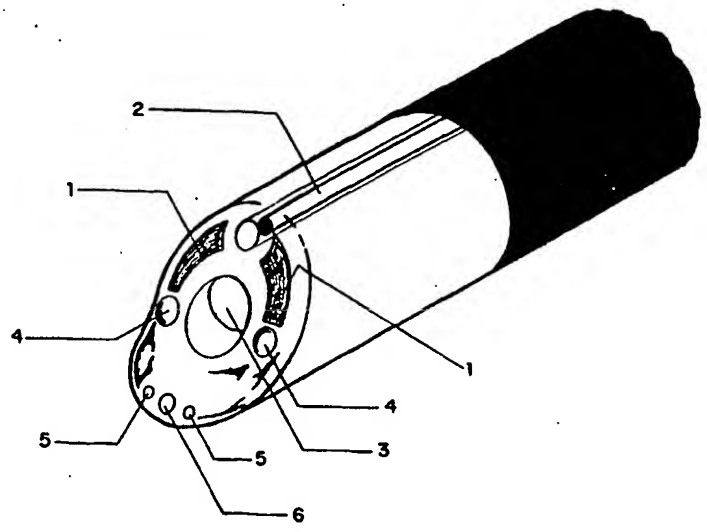

(57) Abstract

This invention is a medical surgical instrument to perform endoscopic plastic surgery without use of insuflatable gas techniques, avoiding the risk of gas embolization. This instrument has as a working head a blunt/sharp dissector with an optical system (4), illumination source (1), irrigation source (6), aspiration source (5), instrumentation channels (3) for cutting cauterization and suturing instruments, and channels for elevators/retractors (2) that can create a workspace at the subcutaneous tissue without use of gas.

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SURGICAL INSTRUMENT TO PERFORM SUBCUTANEOUS ENDOSCOPIC SURGERY

This invent is a surgical instrument to perform endoscopic surgery in the subcutaneous tissue. It has a workhead that can perform the funções of visualization, irrigation, aspiracion, cutting, cauterization, instrumentation in the subcutaneous tissue, and can criate its own work space without use of insuflate gas.

The Endoscopic Surgery Technics has been used in General Surgery, Ginecology, Ortopedics, and its advantages over the tradicional surgical technics has been shwoed in these diferents fields.

Endoscopic Surgery Technique allow a more confortable position to the surgeon; the amplification of images seen in the video monitor make it more safe; delicate procedures can be performed trought small incisions, all specific advantages so diserable in Cosmetic Plastic Surgery.

Videoendoscopic technique has been developed in inner cavities and anatomical spaces that cam bee expanded by gases (peritoneal and pleural cavities) because a work space is required between the optical sisten and the tissues for the purposes of ilumunation, capture of images and execution of procedures.

Working at the subcutaneous tissue the surgeon necessary must cut a many vessels In this way the traditional

Endoscopic Gas Infuflator Methods are a dangerous step due to the a risk of gas embolization, its dispersion and toxicity.

This device is a medical surgical instrument to bee used in Endoscopic Plastic Surgery, the "so called " SUBCUTANEOUSTOMOSCOPE that allow to work at the subcutaneous tissue through small incision without use of gases because it can criate its own work space avoiting the risk of gas embolous.

The caracteristic of this instrument are a "workhead" like a nave or capsul that can perform a blump/sharp disseccion at the subcutaneous tissue under monitor view, and can perform Subcutaneous Endoscopic Surgery through accesory canals providing instrumentation source, ligth source, cut/cauterization, aspiration sources. It have separetors/elevators and can cried its own workspace, avoiting the use of insuflate gas technics and its riks.

Diferents prototypes were built and experimental surgery has been done on d ogs, pigs, and cadaveres, and the viability of the method has been proved; we can perform axilary nodes and braquial plexus endoscopic exploration, the mapping out of a cutaneous flap through endoscopic plus transilumination view, flaps pedicules diseccions,etc.

We have used this instrument to perform Aesthetic Plastic Surgery through small incisions and I have developed and describeb endoscopic technics to Abdomenopplasty and Mammoplasty

The "so called" Subcutaneoustomoscope have the following advantages:

a) Avoid the risk of gas embolization and toxicity of the Videolaparoscopic technique;

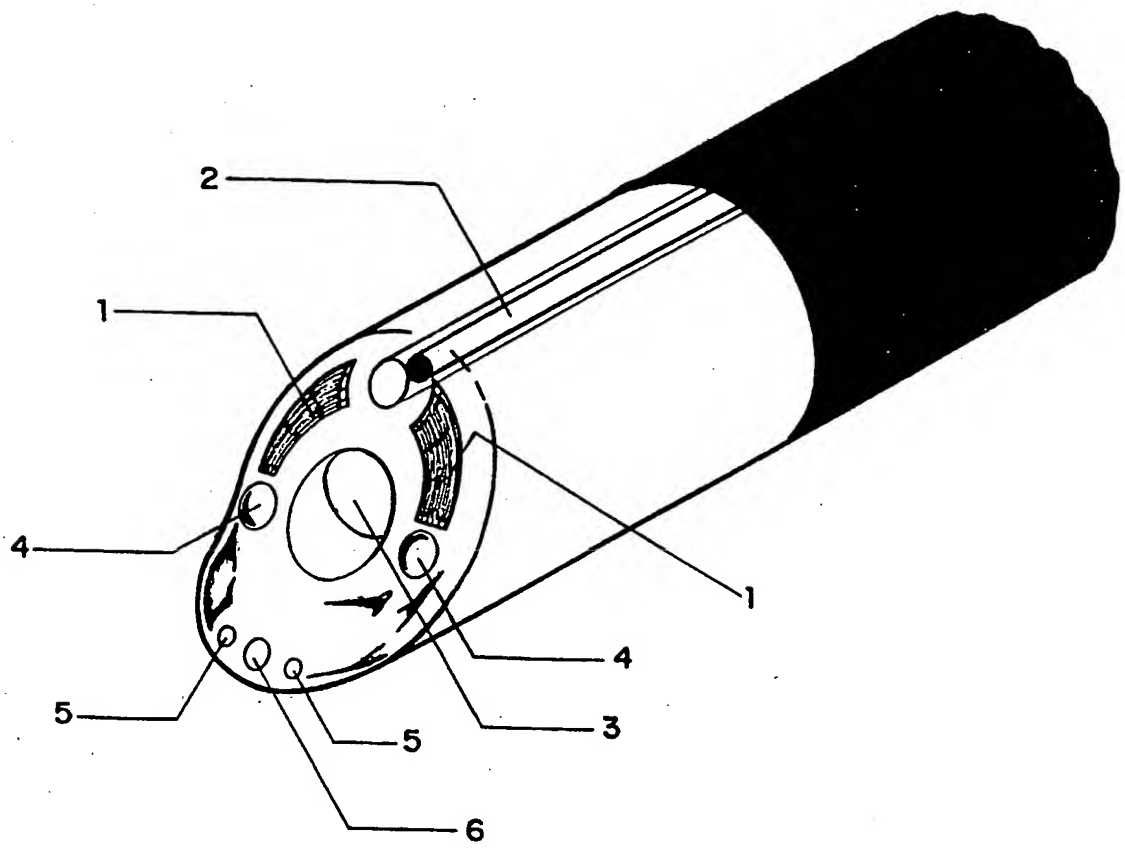
b) Provide disection and visualization simultaneously

c) bring to the Plastic Surgery the advantages of a minimal invasive surgery such as: less tissue trauma , decreased rates of infection, less hospitalization time, and a small scars so deserable whem dealing with Cosmetic Surgery.

In order to help the full understanding of the conception of this instrument, it will be explained and presented by same simple designs.

CLAIM

1- Medical Surgical Instrument to be used in Endoscopic Plastic Surgery without use of insuflatable gas avoiding the risk of gas embolization caracterizaided by to bee a blump/sharp dissector workhead (fig.) provided of a optical system (4), ilumination source(1), irrigation source(6), aspiration source(5), a instrumentation channel to cut/cauterization/suture(3), and elevators/separators to criate a subcutaneous workspace withouth use of gas.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INTERNATIONAL SEARCH REPORT

Inte. ional Application No
PCT/BR 93/00036

A. CLASSIFICATION OF SUBJECT MATTER
IPC 6 A61B17/02 A61B17/32 A61B17/34

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 6 A61B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO,A,92 12680 (LASERSCOPE) 6 August 1992 see page 14, paragraph 2 - page 15, paragraph 3; figures 4,7-9	1
A	WO,A,87 01276 (SONOMED) 12 March 1987 see page 25, paragraph 1; figures 4,6,7	1
A	US,A,5 245 987 (REDMOND) 21 September 1993 see abstract; figures 1,6	1
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Date of the actual completion of the international search	Date of mailing of the international search report
13 June 1994	04.07.94

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INTERNATIONAL SEARCH REPORT

information on patent family members

Inte. .onal Application No
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US-A-4760840	02-08-88	NONE		